Chapter 3

RECONNAISSANCE OPERATIONS

"Those who do not know the conditions of mountains and forests, hazardous defiles, marshes, and swamps, cannot conduct the march of an army."

Sun Tzu

Reconnaissance is a mission undertaken to obtain information by visual observation, or other detection methods, about the activities and resources of an enemy, or about the meteorologic, hydrographic, or geographic characteristics of a particular area. Reconnaissance produces combat information. Combat information is a by-product of all operations, acquired as they are in progress. Reconnaissance, however, is a focused collection effort. It is performed before and during other combat operations to provide information used by the commander to confirm or modify his concept. Cavalry is the corps or division commander's principal reconnaissance organization.

Cavalry performs reconnaissance as organized, but it may be reinforced. Cavalry combines mounted, dismounted, and aerial techniques to accomplish the mission. Integrated air and ground troop operations provide an increased tempo of reconnaissance, depth, and flexibility. Habitually integrated operations are critical in division cavalry. Both ground and air commanders habitually dismount scouts for close reconnaissance and stealth.

CONTENTS

		PAGE
Section I.	Purpose and Fundamentals	3-3
Section II.	Route Reconnaissance	3-9
Section III.	Zone Reconnaissance	3-14
Section IV.	Area Reconnaissance	3-22
Section V.	Reconnaissance in Force	3-24

Reconnaissance involves two contrasting methods. First is reconnaissance by stealth. Using this method, cavalry avoids physical contact with the enemy and gathers information by quiet, deliberate, dismounted techniques. Surveillance is the primary task performed. The second method is aggressive reconnaissance and

fighting for information as necessary. Using this method, cavalry avoids decisive engagement but prepares to fight, especially enemy security and reconnaissance forces, to gain information. This method does not have to be as stealthy and may proceed at a faster pace.

Historically, the best way for cavalry to obtain information on the enemy has been aggressive action requiring combat; in other words, fighting for information. Fighting for information means employing reconnaissance by fire, attacking the enemy with fire, and conducting hasty attacks with subordinate units. Fighting for information does not entail units as a whole becoming decisively engaged, conducting deliberate attacks, or assaulting a prepared position. Through fighting for information, cavalry forces the enemy to disclose not only his disposition but also to reveal his intent and will to fight.

Cavalry needs the capability to perform reconnaissance using both methods. Scouts require vehicles and aircraft that allow reconnaissance by stealth and the ability to fight when necessary. The troop and squadron support the scouts with tanks or other heavier vehicles, attack helicopters, and fire support, which provide the primary fighting capability.

The distances at which cavalry operates from the main body and the fluid nature of reconnaissance operations place additional unique requirements on cavalry organizations. They require vehicles with an extended operating range and increased on-board storage capacity to reduce the burden on a stretched service support system. Extended self-sustainment reduces constraints imposed by a logistics tail. Cavalry requires long-range communications, internally and externally, to ensure adequate command and control and reporting over extended distances. Information that cannot be reported is of no use to the division or corps commander. A mobility differential, air and ground, over the main body of the division or corps is the foundation of flexible, extended, and unfettered reconnaissance. This mobility is enhanced by effective long-range communications and an organizational structure reducing reliance on outside support. These factors taken together enable cavalry to respond rapidly, to operate over large distances, and to reconnoiter as organized.

Surveillance is a primary task of cavalry during reconnaissance operations. Surveillance is the systematic observation of airspace or surface areas by visual, aural, electronic, photographic, or other means. Scouts, ground and air, are the principal collectors of information. Scouts conduct surveillance using their natural senses. They require equipment that enhances their senses, allowing them to conduct mounted and dismounted surveillance with stealth, at long ranges, and in limited visibility. FM 1-116, FM 7-92, FM 17-98, and FM 17-98-1 discuss scouting techniques in detail.

Section I. Purpose and Fundamentals

PURPOSE

Cavalry does not perform a reconnaissance mission for its own sake. Cavalry performs reconnaissance for another friendly force to provide it fresh, accurate information about the terrain and enemy within the area. Reconnaissance is an inherent part of security and other combat missions. Reconnaissance allows the follow-on forces to maneuver more freely and rapidly to the objective. Reconnaissance allows the higher commander to keep other forces free from contact as long as possible and concentrated for the decisive engagement.

FUNDAMENTALS

Successful reconnaissance operations are planned and performed with six fundamentals in mind:

- Maximum reconnaissance force forward.
- Orient on the location or movement of the reconnaissance objective.
- Report all information rapidly and accurately.
- Retain freedom to maneuver.
- Gain and maintain enemy contact.
- Develop the situation rapidly.

Maximum Reconnaissance Force Forward

In reconnaissance, every scout makes a difference. Cavalry often conducts reconnaissance over extended frontages and requires the maximum number of scouts forward to perform the mission. Cavalry units normally do not keep scout platoons or aeroscouts in reserve. Extended operations may require commanders to rotate scouts or otherwise plan rest and resupply operations to maintain a continuous reconnaissance effort. This does not mean scouts are always arrayed in a linear fashion. Depth is essential, especially in restricted terrain or in a contaminated environment. Depth is often achieved through integrated air and ground scout actions. (For further information concerning the doctrinal frontages/distances of armored cavalry units in conjunction with reconnaissance operations, refer to FM 1-116, FM 17-97, and FM 17-98.)

Orient on the Location or Movement of the Reconnaissance Objective

The commander focuses the efforts of the unit with a reconnaissance objective. This objective may be a terrain feature, control measure, or enemy force. If the enemy force is moving, the unit adjusts the scheme of maneuver to maintain orientation on the enemy. IPB (intelligence preparation of the battlefield) may identify the reconnaissance objective. Commanders remain focused on reaching the reconnaissance objective regardless of what is encountered during the mission. Capabilities and limitations of the unit are a significant factor influencing how aggressively the commander attempts to reach the objective.

Report All Information Rapidly and Accurately

Cavalry performs reconnaissance to gather information. Higher commanders need this information to confirm or make decisions. Combat information loses value quickly. Absence of the enemy is just as important as his presence. Scouts report exactly what they see. Troop and squadron commanders clarify and summarize, but do not delete raw information reported by the scouts. Seemingly unimportant information may be extremely important in context with other information not available to the squadron. Negative reports may tell more than positive reports or no report at all. IPB helps to focus reconnaissance efforts by identifying critical information required by the corps or division. Communications equipment must be adequate to allow for an uninterrupted flow of information.

Retain Freedom to Maneuver

Cavalry units must retain the ability to maneuver on the battlefield to continue the reconnaissance mission. Decisive engagement occurs when a unit is fully committed and cannot maneuver or extricate itself. When this happens, reconnaissance ceases. Use of proper movement techniques, overwatch, and good reconnaissance techniques helps to prevent decisive engagement. IPB provides information used by leaders to anticipate locations of likely contact. Leaders remain abreast of the overall situation and anticipate tactical developments. Mental agility allows leaders to dictate events, not merely react to enemy action.

Gain and Maintain Enemy Contact

Information on the enemy is always critical. Unreported enemy actions can have decisive impact on friendly operations. The enemy is seldom static and changing situations must be reported to the commander. Contact is any condition ranging from a surveillance sighting to engaging in close combat. Surveillance is often sufficient and is the preferred method of maintaining contact. When necessary or required, fire and movement may be used. Once gained, contact is not lost unless ordered. Responsibility for maintaining contact does not rest solely with the scout or

small unit first gaining it. Troop, squadron, and regimental commanders are responsible for maintaining contact using all the resources available to them.

Develop the Situation Rapidly

During reconnaissance, cavalry frequently and repeatedly encounters tactical situations that require action to determine what is being faced. These situations may be terrain oriented, obstacles, or enemy. Terrain or obstacle situations require close reconnaissance; bypass; hasty breach, if necessary; and marking. If an enemy force is encountered, cavalry determines his size, composition, dispositions, and activities. IPB provides the threat situational information that guides the effort. Reconnaissance techniques, often in the form of drills, are used while developing the situation.

ACTIONS ON CONTACT

Actions on contact are a series of combat actions taken on contact with the enemy to develop the situation. Obstacles are treated like enemy contact since they are assumed to be covered by fire. The element making contact initiates these actions and they occur at each level of command, often simultaneously. Units perform these actions whether or not the enemy has detected the presence of the scout. Actions on contact are as follows:

- Deploy and report.
- Develop the situation.
- Choose a course of action.
- Recommend or execute a course of action.

Deploy and Report

Upon encountering an obstacle or enemy force, the element of the troop making contact deploys to a covered position affording observation and fields of fire. If necessary, the element uses direct fire to suppress the enemy, allowing freedom to maneuver. An immediate contact report is submitted with whatever information is available. This report alerts the commander and allows him to begin necessary actions.

Develop the Situation

The leader of the element in contact develops the situation to define the threat being faced, using various reconnaissance techniques as appropriate. These techniques range from stealthy dismounted reconnaissance, mounted reconnaissance, and reconnaissance by fire-both direct and indirect. The troop or squadron commander continues the mission with other elements to a designated limit of advance. Doing so helps to develop the situation across the front and provides more

maneuver space to execute subsequent action. Once a clearer picture of the situation is developed, detailed spot reports are forwarded.

Choose a Course of Action

Once the leader in contact has gathered enough information to make a decision, he selects a course of action. The course of action should adhere to the intent of the commander, be within the capability of the unit, and allow the unit to resume the mission as soon as possible. For an obstacle, these courses of action are a hasty breach or bypass. For enemy contact, courses of action consist of the following:

- Hasty attack. A hasty attack is executed if sufficient combat power is available, and it will not detract from mission accomplishment. A hasty attack is executed by at least a troop, which can mass adequate combat power.
- Bypass. The enemy may be bypassed if sufficient combat power is not available, or if an attack will jeopardize mission accomplishment. The unit requests permission to bypass unless stated in orders. The commander must keep a minimum force in contact with the bypassed enemy.
- Hasty defense. If a hasty attack is not possible or a bypass is not feasible, the
 leader establishes a hasty defense or screen. The unit will conduct a hasty
 defense if it can defend against an enemy force. If the enemy contact
 exceeds the unit's capability to defend, it may elect to establish a screen and
 maintain contact through observation. The unit concentrates on maintaining
 contact with the enemy and fixing it in place with indirect or possibly direct
 fire until additional combat power can be brought to bear from supporting
 units.

Recommend a Course of Action

Once the leader has selected a course of action, he reports it to his commander. The commander approves or disapproves the course of action based upon its impact on the overall mission. The SOP may provide automatic approval of certain actions to avoid unnecessary delay. If the higher commander assumes responsibility to continue developing the situation, the leader in contact supports his actions as ordered.

RECONNAISSANCE TECHNIQUES

Reconnaissance techniques are the basic methods of using available equipment and personnel to accomplish reconnaissance tasks. These techniques fall into the broad categories of aerial, mounted, and dismounted. They are used in combination to meet the needs of the situation. Units train to standards on reconnaissance techniques, apply them with common sense, and make them part of the unit SOP. Techniques prevent reconnaissance that is blind, reckless, or blundering.

Troop commanders plan on using a combination of mounted and dismounted reconnaissance. Mounted reconnaissance is appropriate when—

- Time is limited.
- Detailed reconnaissance is not required.
- An air cavalry troop is performing coordinated reconnaissance.
- IPB provides good information on the enemy.
- Terrain is open.

Dismounted reconnaissance is appropriate when—

- Time is available.
- Detailed reconnaissance is required.
- Stealth is required.
- IPB indicates close proximity to enemy positions.
- Enemy contact is expected or has been achieved.
- Danger areas are encountered.
- Restrictive terrain is encountered.
- Security is the primary concern.

Air cavalry troop commanders may set down observation helicopters on terrain affording good observation and establish a temporary observation post (OP) to extend the station time of aircrews and aircraft. Pilots dismount under the following circumstances throughout reconnaissance missions:

- Close reconnaissance of obstacles.
- Evaluation of bridges.
- Evaluation of ford or crossing sites.

Reconnaissance by fire is a method of reconnaissance in which fire is placed on a suspected enemy position to cause the enemy to disclose his presence by movement or return fire. This technique is appropriate when time is critical, while developing the situation once in contact, or when mounted or dismounted maneuver is not possible. During reconnaissance by fire, scouts maintain surveillance of the

known or suspected enemy position looking for a reaction. Any surprise maintained to that point will be lost. Reconnaissance by fire may not cause seasoned or prepared enemy forces to react. Either direct or indirect fire is used (see Figure 3-1). Reconnaissance by fire entails the risk that the unit may precipitate a decisive engagement. The unit commander may use reconnaissance by fire when—

- Time is critical.
- Natural or man-made obstacles are encountered and could be overmatched by an enemy force.
- A suspected enemy position fits the situation template.
- Bunker complexes that may or may not be occupied are encountered.
- Enemy locations are known.

	ADVANTAGES	DISADVANTAGES
DIRECT FIRE	Rapid response.	Sacrifices stealth and discloses friendly positions.
	Accuracy.	Low volume of fire may reveal intention.
	Minimum communications required.	Observation capability by firing vehicle reduced.
	Fire can be delivered from different directions.	Limited by the range of direct-fire weapons and ammunition availability.
INDIRECT FIRE	Security for the scout directing the fire and observing enemy action.	Slower to deliver initial round.
	Permits all scout elements to observe effects.	Usually requires adjustment for accuracy.
	Wider variety of ammunition available for the mission.	Mortar or artillery ammunition availability.
	More likely to force enemy movement.	Less likely to cause the enemy to return fire.

Figure 3-1. Reconnaissance by fire.

Troops encounter repetitive tactical situations during reconnaissance that lend themselves readily to establishment as techniques. These situations include certain terrain features, bridges, water obstacles, built-up areas, man-made obstacles, and forested areas. These techniques are discussed in detail in FM 17-97.

Limited visibility operations are conducted at night and during other periods of reduced visibility. These periods include smoke and battlefield obscuration, fog, rain, snow, and other weather or atmospheric conditions. These conditions affect air and ground troops in different manners. Air cavalry troops may also be adversely affected by high winds, extreme temperature, and loose top soil or sand. Reconnaissance during limited visibility is generally slower, but often is better for stealth. The capabilities of a unit's equipment are a major factor in assessing the extent of degradation suffered. Dismounted reconnaissance and patrols are more frequent, night and thermal observation devices employed, and electronic surveillance devices and ground surveillance radars used. Engines and tracked movements are audible for considerable distances at night, making vehicles highly susceptible to ambush. Cross-country movement is more difficult, and except for short cross-country movements, mounted reconnaissance may focus on road networks. Sound and light discipline prevents compromise and ambush.

Commanders should emphasize greater depth and concentration of scouts in critical areas during operations in a contaminated environment. Scouts and cavalry units are trained to detect and reconnoiter contaminated areas and to perform damage control in an NBC environment. Likewise, reconnaissance by cavalry units is critical in nuclear warfare. Cavalry can reconnoiter the effects of both friendly or enemy nuclear fires and determine how and where friendly units can exploit.

Section II. Route Reconnaissance

A route reconnaissance is a directed effort to obtain detailed information of a specified route and all terrain from which the enemy could influence movement along that route. A route is the prescribed course to be traveled from a specific point of origin to a specific destination. Route reconnaissance may orient on a road or on an axis of advance. This mission is appropriate when a commander wants to use a route. He must first ensure that it is clear of obstacles and enemy and that it will support the proposed forces before he uses it. Route reconnaissance may be performed as a mission itself or as a task during another mission. Route reconnaissance proceeds faster than zone reconnaissance because effort is concentrated along the route and terrain the enemy can use to dominate movement along the route.

Route reconnaissance is seldom performed by a squadron. The squadron obtains route information as part of another mission or by assigning the task to a troop. Reconnaissance of a specific route may be a specified task for a troop during zone

reconnaissance. Only one major route should be assigned to a troop when contact is expected. Under other circumstances, the troop may reconnoiter one route per assigned scout platoon. Multiple routes must be close enough together for the troop commander to effectively command and control the operation. Integrated air and ground troop reconnaissance provides for faster and more secure reconnaissance.

CRITICAL TASKS

Certain tasks must be accomplished during route reconnaissance unless the squadron commander specifically directs otherwise. Critical tasks serve as a guide to indicate those tasks that are associated with a route reconnaissance. These tasks are not a checklist or sequentially arranged. Some may not be appropriate in all situations. Based on time and the commander's intent, the troop may be directed to reconnoiter for specific information only. IPB often indicates the critical information desired by the higher commander. An air cavalry troop may be directed to accomplish some tasks and a ground troop others. The following are critical tasks:

- Reconnoiter and determine the trafficability of the route.
- Reconnoiter all terrain the enemy can use to dominate movement along the route.
- Reconnoiter all built-up areas along the route.
- Reconnoiter all lateral routes.
- Inspect and evaluate all bridges on the route.
- Locate fords or crossing sites near all bridges on the route.
- Inspect and evaluate all overpasses, underpasses, and culverts.
- Reconnoiter all defiles along the route. Clear all defiles of enemy and obstacles within capability or locate a bypass.
- Locate and clear the route of mines, obstacles, and barriers within capability.
- Locate a bypass around built-up areas, obstacles, and containinated areas.
- Find and report all enemy that can influence movement along the route.
- Report route information.

Determining trafficability of a route requires the troop to determine the capability or extent to which the terrain will bear traffic or permit continued movement of a force. Modern roadway features are often difficult to quickly evaluate in the process of route reconnaissance. In some cases, the troop assesses the capability of the feature to accommodate the follow-on forces. The troop does not conduct a deliberate engineer route classification. Engineers can provide a detailed route and obstacle classification effort and reduce obstacles as required. The route reconnaissance performed by the troop allows the engineers to proceed faster and to focus more on specific points of interest along the route.

PLANNING CONSIDERATIONS

The squadron commander assigns the mission to the troop as a mission or specific task in another mission. This section discusses route reconnaissance in the context of an assigned troop mission. This mission may be assigned to a ground or air cavalry troop. Ground cavalry provides a more deliberate and detailed reconnaissance, particularly in close terrain. Air cavalry is effective when speed is essential and terrain is open. This mission lends itself readily to formation of air and ground teams in division cavalry. Teams provide a thorough and fast reconnaissance effort. The squadron commander normally provides the following guidance to the troop commanders:

- Critical tasks to be accomplished by air and ground elements of the reconnaissance team, when used. Any tasks that may be deleted during the reconnaissance are identified.
- Task organization. Any reinforcements, especially engineers, and their relationship to the troop are identified. Supporting artillery relationships are also defined.
- Start point, release point, and designation of the route.
- Mission to be performed to the start point and after reaching the release point.
- Time the mission is to start and, if required, to be completed.
- Critical points along the route identified as checkpoints.
- IPB information on the route and enemy situation.
- Any constraints or restrictions.

The troop commander considers several factors in formulating his concept. IPB provides critical information on the enemy and terrain. Enemy threats may be encountered in two basic forms:

- Ambushes along the route in close or restricted terrain.
- Attack by long-range direct or indirect fires from dominating terrain along the route.

Analysis of the terrain provides an indication of danger areas and the nature of the potential threat. From this information, the commander determines how much terrain on each flank of the route must be reconnoitered and the organization for combat. Any constraints or restrictions may also influence how much terrain is reconnoitered.

The troop commander adds control measures to provide an adequate framework for the mission (see Figure 3-2). He places a boundary on both sides of the route far

enough out to provide reconnaissance of the dominating terrain. A line of departure is placed perpendicular to the route short of the start point, allowing adequate space to deploy into formation. A limit of advance is placed far enough beyond the release point to enclose dominating terrain that overmatches it. He uses additional phase lines to maintain a coordinated troop reconnaissance. Boundaries and phase lines are drawn along recognizable terrain. The terrain features should be identifiable from ground and air to assist air-ground coordination. Checkpoints placed along the route control movement and indicate critical points. The commander uses other control measures as necessary for control and maneuver flexibility.

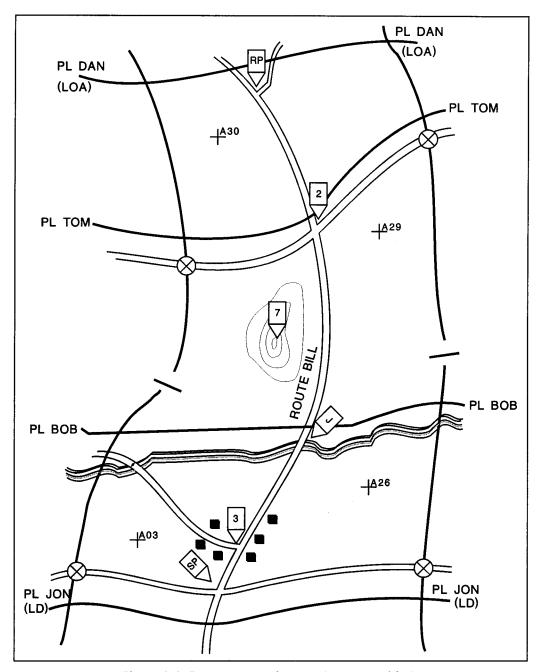


Figure 3-2. Route reconnaissance (troop graphics).

The cavalry troop normally performs a tactical road march to the line of departure for the route reconnaissance. The amount of intelligence indicates how much security the commander uses during the move. Enemy that are encountered en route to the line of departure may be bypassed. Upon completion of the mission, the troop may depart the area, screen along the limit of advance, or perform another mission, such as zone reconnaissance. Consideration of follow-on missions may influence the concept for performing the route reconnaissance.

When reconnoitering one route, the commander assigns one scout platoon to reconnoiter the route itself. He places the other scout platoon to either side of the route to reconnoiter the dominating terrain. This flank platoon essentially performs zone reconnaissance and may precede the platoon on the route to provide it greater security. The mortars follow the lead scouts to provide fires up to two-thirds of their effective range forward of the scouts. They may move off the route to avoid interfering with the scout platoon on the route. Mortars may displace by squads to provide continuous fire support. Tank platoons, when present, move behind the scout platoon on the route. They remain in depth to retain flexibility for the troop commander in responding to enemy contact. In the absence of tanks, the troop commander may use a scout platoon in this role. The troop combat trains and command post follow, moving generally along the route displacing to successive positions. These follow-on troop elements move along the route for speed, but always displace off the route when occupying positions. The troop commander is located forward to observe and control the reconnaissance effort. Engineer reconnaissance elements tasked organized to the troop can provide both tactical and technical information to the troop commander. The engineer reconnaissance elements focus on specific obstacles, bridges, and minefield, for example, adding to the quality of the battlefield information reports. The XO compiles reports and provides updated route reconnaissance information to the squadron. Route report formats are established by the SOP.

When reconnoitering multiple routes, the commander assigns one route to each scout platoon. The troop may be augmented with an engineer reconnaissance element to facilitate technical and tactical reconnaissance. One route is the maximum that may be handled by a scout platoon. (FM 17-98 and FM 7-92 discuss scout platoon techniques.) Tank platoons move behind scout platoons on each route. The commander follows one platoon, usually the main effort, on one route and the XO follows the other route. Considerations for other assets remain the same.

When reconnoitering a ground route, the air troop commander considers the same factors of IPB and control measures as the ground troop commander. Scout weapon teams are normally assigned to reconnoiter the terrain on the flanks of the route while another scout weapon team concentrates on the route itself. Frequent dismounting is often necessary to reconnoiter specific route features. The disadvantages of air cavalry troops are the limited personnel available for dismounted reconnaissance, limited ability to reconnoiter close terrain, and difficulty in determining actual route trafficability. An air cavalry troop is ideal, however, to reassess a previously reconnoitered route to determine if it remains trafficable and clear of enemy. A route may be too long for the troop to reconnoiter without rotating

teams through a FARP. When the commander does so, he must always maintain at least one team in zone.

In division cavalry, air and ground teams are well suited for route reconnaissance. Air cavalry may facilitate the route reconnaissance by reconnoitering the terrain on the flanks of the route, forward of the ground troop, between assigned troop routes, or by screening an exposed flank. The air troop may also quickly reconnoiter key points along the route to assist the ground troop. The ground troop concentrates on determining route trafficability and reconnaissance of close terrain. Air and ground troop commanders coordinate control measures so they are useful for both and enhance mutual support.

An air cavalry troop may be assigned an air route reconnaissance mission. The principles are the same as those for a ground route. Aviation forces moving along an air route are primarily concerned with the location of enemy forces, ease of navigation, suitability of landing zones, and hazards to flight. Hazards to flight include natural and man-made obstacles, such as buildings, wires, mountainous areas, and enemy air defense weapons locations.

Section III. Zone Reconnaissance

A zone reconnaissance is a directed effort to obtain detailed information concerning all routes, obstacles, terrain, and enemy forces within a zone defined by boundaries. Obstacles also include chemical and radiological contamination. A zone reconnaissance is assigned when the enemy situation is vague or when information concerning cross-country trafficability is desired. The commander, through his intent, may focus the reconnaissance on the enemy, the terrain, or a combination of the two. Additionally, the commander may focus the reconnaissance effort on a specific enemy force such as the enemy's reserve tank brigade. It is appropriate when previous knowledge of the terrain is limited or when combat operations have altered the terrain. The commander assigning the mission needs this information before other forces enter the zone. Zone reconnaissance may be oriented on the main body's zone of action or an axis of advance.

Zone reconnaissance is a deliberate, time-consuming process. This mission takes more time than any other reconnaissance mission. The cavalry commander must ensure he has been given adequate time to accomplish the mission. If not, he seeks additional time or identifies the critical information desired so that he can use various techniques to accelerate the reconnaissance. If time is a constraint, the commander will need to focus the reconnaissance to achieve the higher commander's intent. Accelerating reconnaissance increases the risk assumed by the unit. Each situation requires a certain minimum time for adequate reconnaissance and an acceptable level of risk. Cavalry units equipped with or supported by tanks can assume greater risk and perform faster reconnaissance than those without tanks. The commander ensures he has received at least the minimum amount of time. The type of cavalry unit and factors of METT-T determine these time requirements.

Zone reconnaissance may be performed by any cavalry unit. They may perform this mission as organized or be reinforced. Troops often perform zone reconnaissance as part of another squadron mission. Troop commanders also receive route reconnaissance as a specified task during this mission.

CRITICAL TASKS

Certain critical tasks must be accomplished during a zone reconnaissance unless otherwise directed. Zone reconnaissance is a deliberate, time-consuming process if not specifically focused. During a zone reconnaissance, the cavalry unit accomplishes the critical tasks listed below unless specifically directed otherwise by the higher commander. The higher commander, depending on the conditions of METT-T, may select specific critical tasks for the troop to accomplish. The commander, in the commander's intent paragraph, should focus the unit on its critical tasks when he articulates his purpose. Additionally the critical tasks should be listed in the coordinating instructions since they are tasks that apply to two or more units. Three primary tasks are associated with a zone reconnaissance:

- Find and report all enemy forces within the zone.
- Reconnoiter specific terrain within the zone.
- Report reconnaissance information.

The commander, time permitting, may also direct the troop to accomplish the following:

- Reconnoiter all terrain within the zone.
- Inspect and classify all bridges within the zone.
- Locate fords or crossing sites near all bridges in the zone.
- Inspect and classify all overpasses, underpasses, and culverts.
- Locate and clear all mines, obstacles, and barriers in the zone within its capability.
- Locate a bypass around built-up areas, obstacles, and contaminated areas.

The commander may select specific critical tasks from this menu depending on METT-T. He may also choose to further refine these tasks in his guidance. For example; he may focus the troop's efforts on a specific enemy force and specific terrain features that he deems important to the success of the squadron's mission.

REGIMENTAL PLANNING CONSIDERATIONS

The regiment often accomplishes zone reconnaissance as an aspect of offensive cover or by directing squadrons to perform the mission. When assigned a zone reconnaissance mission, the regimental commander is provided considerable

freedom of action within the corps commander's intent. This allows the reconnaissance effort to pull the corps main body along the lines of least resistance and seize opportunities as they occur.

The regiment normally performs reconnaissance in a wide zone with three ground squadrons abreast and the aviation squadron forward. The regimental commander establishes adequate control measures to ensure synchronized reconnaissance, but decentralizes execution to the squadron commanders. Combat support assets are frequently task organized to squadrons to support their reconnaissance.

The regiment may perform reconnaissance as organized or be reinforced. Attached maneuver task forces are normally employed as a reserve, providing the regiment a greater capability to develop the situation. When no maneuver units are attached, the regiment may place constraints on squadron tank companies and/or attack helicopter troops as a contingency regimental reserve. Attached combat support assets are frequently task organized with the ground squadrons. Artillery may be placed in direct support to squadrons or held in general support to the regiment.

Normally, air cavalry troops are under the control of the aviation squadron. The regimental commander may direct the aviation squadron to place one air troop under the operational control of each ground squadron. Whether the air troops are operationally controlled or not, the aviation squadron commander will normally assign one troop into each squadron zone, using the ground unit graphics. This also maintains the habitual relationship between the air cavalry troop and ground squadron. The liaison officers attached from the aviation squadron to the ground squadrons are critical for successful coordination. Regimental SOP establishes the procedures used to facilitate air and ground operations, reducing or eliminating the need for lengthy coordination during the mission.

The aviation squadron commander is able to use the joint air attack team more effectively when air cavalry troops are left under his control. Additionally, he can mass the squadron quickly and manage his assets better to meet the regimental commander's guidance. Attack helicopter troops may be held in reserve. Often the regimental commander places constraints on their employment as the attack troops represent the most responsive force he has available.

The addition of the AH-64 to the attack helicopter troops of the regiment gives the regimental commander an additional asset that may be more effective if used in the active reconnaissance and security roles than being held in reserve. The sensors on the AH-64, coupled with its mobility and extended weapons ranges, allow earlier detection of enemy units, provide a greater stand-off capability, and give ground cavalry units more reaction time to develop the situation.

As units become equipped with the AH-64D Longbow, the regimental commander will have an even greater sensor/shooter asset. This system will allow aircraft to acquire and identify multiple enemy units and provide information in both quantity and accuracy to allow the regimental commander more reaction time.

SQUADRON PLANNING CONSIDERATIONS

The squadron commander receives certain minimum guidance when assigned a zone reconnaissance mission. Most important is the commander's intent. The nature of reconnaissance requires freedom of action for the squadron. The squadron commander may focus or direct the zone reconnaissance to specific critical tasks based on his analysis of the situation. He must understand that it may not be possible to execute all the critical tasks. The squadron commander must understand the concept for the follow-on forces so he can support the mission with the reconnaissance effort. The commander's intent, however, allows for flexibility to take advantage of opportunities uncovered by the squadron. The squadron commander must recognize and understand the significance of these opportunities, present them directly to the higher commander, and support the modified concept as directed. This often entails a change of mission or focused reconnaissance into a gap in enemy positions. Reconnaissance pull is an inherent part of agility and the squadron always remains flexible to seize opportunities.

The higher commander defines reinforcements attached to the squadron and provides adequate fire support. He also provides graphic control measures. These include the boundaries for the mission, a line of departure, and an objective or limit of advance. The boundaries may be defined as an extension of the division and corps boundaries or as the axis of advance for an attacking force. The line of departure is the same as the main body unless otherwise specified. The objective or limit of advance is used to focus the reconnaissance effort. It may be terrain or force oriented and may correspond to the main body objective. The operations overlay of the main body force is provided for the squadron TOC. The S2 obtains updated or new IPB information.

IPB provides an event template, terrain analysis, and enemy situation templates as known at that point. The event template will provide named areas of interest (NAI) that will identify information requirements. The reconnaissance will confirm or refute much of this information. The squadron uses this available information, however, to help determine factors, such as—

- Speed of the reconnaissance effort and where more deliberate reconnaissance is required.
- The overall focus of the reconnaissance.
- Missions of subordinate troops and zones for ground troops.
- Essential air troop on-station times or locations.
- Identification of essential critical tasks.

Integration of air and ground troop operations in division cavalry includes determination of the following:

- Command and control relationship of troops. Normally the squadron is controlling all troops. Air and ground teams may be formed as necessary during the mission.
- Air troop's rotation plan and missions.

- Ground troop's missions.
- Critical tasks to be performed by air and ground troops. Air cavalry troops
 accelerate the reconnaissance effort by reconnoitering open terrain,
 reconnoitering forward of the ground troops, screening an open flank, or
 orienting on locating enemy. These tasks allow ground troops to focus on
 close terrain, routes, and close reconnaissance of obstacles and enemy.
 When air and ground reconnaissance efforts are integrated, the squadron
 commander is also capable of developing the situation faster.

The regimental ground squadron seldom has more than a single air troop available. This troop is either under the operational control of the ground squadron or under control of the aviation squadron performing reconnaissance forward of the ground squadron. In either case, the ground squadron commander controls the terrain. The air troop commander always operates on or monitors the ground squadron command net.

Specific tasks assigned to an air cavalry troop may include the following:

- Reconnoiter terrain not easily accessible to ground troop vehicles.
- Rapidly check key points in zone.
- Locate the flanks of enemy forces encountered by air or ground scouts.
- Locate bypasses around obstacles and enemy positions.
- Provide security on the far side of obstacles while ground troops reconnoiter and clear them.
- Locate and maintain contact with large enemy formations, especially moving ones, before they make contact with the squadron. This gives the squadron commander valuable time to act.
- When a hasty attack is necessary, coordinate joint air attack team or attack helicopter operations.

When the division cavalry squadron is reconnoitering in the zone of the division, squadron boundaries are normally the boundaries of the division. When assigned an axis of advance, the commander establishes boundaries for the squadron beyond the axis on both sides to include reconnaissance of dominating terrain. The size of the axis determines whether the squadron treats it as a route or zone reconnaissance.

The regiment may perform zone reconnaissance across the entire corps sector, or in one portion of it. The regimental commander assigns zones to each squadron depending on the corps commander's requirements.

The squadron assigns zones for the ground troops (see Figure 3-3). FM 17-97 details cavalry troop capabilities. Zone reconnaissance is normally performed over an extended distance, requiring that all ground troops be employed abreast. The capacity of the squadron is a factor of the capability and status of assigned scout platoons. FM 17-98 details scout platoon capabilities. Boundaries are designated to

allow the troops to remain abreast of one another during the mission. Zones may not necessarily be the same size. The main body frequently orients movement along a major route, especially in an axis of advance. Reconnaissance of this route becomes a specified task for a troop. Phase lines control progress through the zone. Boundaries and phase lines are drawn along recognizable terrain. Contact points along boundaries maintain coordinated reconnaissance. Checkpoints are used to indicate critical terrain features, to control reconnaissance, or to coordinate air and ground teamwork. Additional control measures are used as necessary.

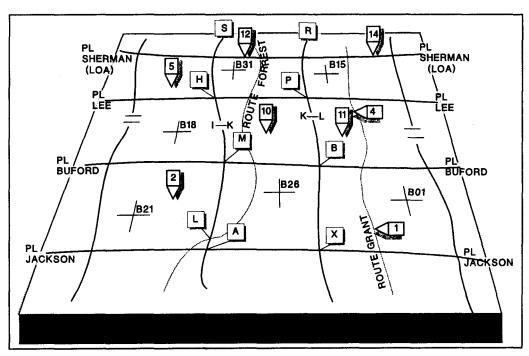


Figure 3-3. Regimental squadron zone reconnaissance.

Task organized reinforcements are normally retained under squadron control because of the vague situation. In the division cavalry squadron, maneuver company teams serve as a reserve and are used by the squadron commander to develop the situation on enemy contact. The regimental cavalry squadron uses its organic tank company in this role. Reserves are positioned to facilitate rapid employment anywhere in the zone. Engineers follow or are attached to the troop that is assigned a critical route to assist in reconnaissance, obstacle reduction, and route repair. The regimental squadron artillery battery normally provides direct support to the squadron. Priority of fire for artillery is assigned to troops based on intelligence or the main effort. ADA priority is normally toward protecting trains, command posts, artillery battery, and any designated reserve. The cavalry troops are too dispersed and rely upon passive air defense protective measures.

Both the squadron TAC CP and main CP are normally operational to ensure continuous communications over extended distances within the squadron and to higher headquarters. Combat trains generally move through the center of the zone along a route providing good movement laterally and in depth. A UMCP may move along an alternate route to provide adequate support across a wide zone. The division cavalry squadron's field trains may be with the forward support battalion of the lead brigade in the main body. The field trains of the regimental cavalry squadron are either collocated with the regimental support squadron or echeloned in depth behind the combat trains. Depth of the zone or anticipated duration of the operation dictate arrangement of combat service support assets and how much is forward. Class III and Class V are the major concerns. A forward positioned FARP reduces aircraft turnaround time. The FARP may be in the squadron zone or in the zone of the lead unit behind the squadron. The air cavalry troop's forward assembly areas are used. Command posts and combat service support assets remain mobile and bound forward as the squadron advances. The main CP monitors locations and status to ensure no element falls too far behind.

Upon completion of the mission, the squadron proceeds with any assigned follow-on mission. If no mission has been assigned, the squadron provides security along the limit of advance or reconnaissance objective. Major enemy forces beyond the squadron's capability may be encountered before reaching the objective. When no gap or bypass is found, the squadron assumes a hasty defense, continues close reconnaissance, and prepares to pass main body forces forward. Regimental cavalry can fight through heavier enemy forces than division cavalry and may be required to do so to accomplish its reconnaissance mission.

TROOP PLANNING CONSIDERATIONS

The troop commander divides his troop zone into scout platoon zones (see Figure 3-4). As with the troop, the platoon zones are designated to keep the platoons abreast during the reconnaissance. The factors of METT-T determine how to divide these zones. The width of the troop zone requires the commander to place all scout platoons abreast. The troop scout platoons are not placed in reserve. The troop's organic tank platoons perform this role, thereby freeing the scout platoons to perform the reconnaissance mission. Boundaries should not be placed on roads, nor should they divide avenues of approach to preclude division of responsibility. The commander adds additional phase lines, if necessary, to control the progress of the reconnaissance. Boundaries and phase lines are drawn along recognizable terrain. Contact points are added along boundaries on recognizable terrain to maintain a coordinated effort. Checkpoints are added to identify specific terrain features and TIRS (terrain index reference system) for maneuver control and reporting. Other control measures may also be used.

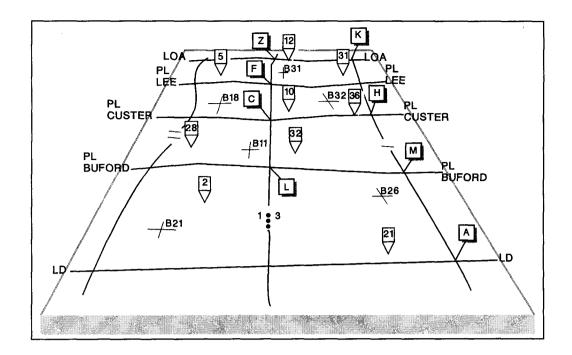


Figure 3-4. Division cavalry troop zone reconnaissance.

The troop commander selects a bombat formation appropriate to the situation. Combat foramations may change during the course of the reconnaissance as terrain or enemy situations change. The mortar section generally moves through the center of the sector or follows a scout platoon, depending on expected enemy contact. The fire support officer plans indirect fires to compensate for mortar section range limitations caused by positioning. Tank platoons, when present, follow scout platoons in depth and remain responsive to developing situations. Tank platoons key their movement on the progress of the scout platoons. The troop command post displaces through the zone, using terrain that affords effective communications. Troop combat trains move under control of the first sergeant, bounding forward based on the troop's movement.

The air cavalry troop commander plans his mission in much the same manner as the ground troop commander. He uses the same operations graphics and considers the same critical tasks. He organizes his troop to accomplish the mission considering the same aspects of IPB as the ground troop. In particular, hazards to navigation and anticipated enemy air defense are considered. The air troop operates in platoons, but may be task organized into scout weapon teams who may use scouts only if the situation permits. The commander identifies and tracks the locations of available FARPs, and monitors the endurance of his crews. He ensures that he has elements on station during those critical times directed by the commander. He plans flight modes and routes to maximize station time actually performing the mission.

Section IV. Area Reconnaissance

An area reconnaissance is a directed effort to obtain detailed information concerning the terrain or enemy activity within a prescribed area. An area reconnaissance is a specialized form of zone reconnaissance. It is assigned to a cavalry unit by the commander under the same circumstances as a zone reconnaissance. The regimental commander may assign an area reconnaissance mission to one of the ground squadrons, the aviation squadron, or task organize an air-ground team to perform the mission. Area reconnaissance proceeds faster than zone reconnaissance since the effort is focused on a specific piece of terrain or enemy force. The squadron or troops may perform area reconnaissance. This mission lends itself to formation of air-ground teams. The squadron may be required to reconnoiter one large area or several smaller ones.

CRITICAL TASKS

During an area reconnaissance, the critical tasks listed below must be accomplished unless the higher commander directs the cavalry unit to do otherwise. Accomplishing all of these tasks is a time-consuming process. Based on time and the commander's intent, the cavalry commander may direct the reconnaissance towards specific information requirements only. Like the zone reconnaissance, the commander should focus his unit in the commander's intent paragraph and list the critical tasks in the specific instructions. Three primary critical tasks are associated with an area reconnaissance:

- Find and report all enemy within the area.
- Reconnoiter specific terrain within the area.
- Report reconnaissance information.

Other critical tasks include the following:

- Reconnoiter all terrain within the area.
- Inspect and classify all bridges within the area.
- Locate fords or crossing sites near all bridges within the area.
- Inspect and classify all overpasses, underpasses, and culverts.
- Locate and clear all mines, obstacles, and barriers in the area within its capability.
- Locate a bypass around built-up areas, obstacles, and contaminated areas.

PLANNING CONSIDERATIONS

The unit normally conducts movement to the area as a tactical road march. IPB indicates how much security is required for the move itself. The unit moves rapidly to the area, reporting and bypassing enemy or obstacles encountered en route. Known enemy outside the area are avoided.

The commander treats the assigned area like a zone reconnaissance. The area and any dominating terrain around it are enclosed in a boundary. Other control measures are used as in a zone reconnaissance (see Figure 3-5). If the area is to be occupied by another force as an assembly area, the unit reconnoiters trafficability of the area to support that force. An air cavalry troop may initially secure the area by establishing a screen.

Upon completion of the reconnaissance, the troop or squadron departs the area on a different route. Alternatively, the unit may proceed on a different mission or secure the area by establishing a screen. The screen may orient in a particular direction or all around the area. If follow-on forces are to occupy the area, the cavalry is relieved by unit quartering parties and continues with other assigned missions.

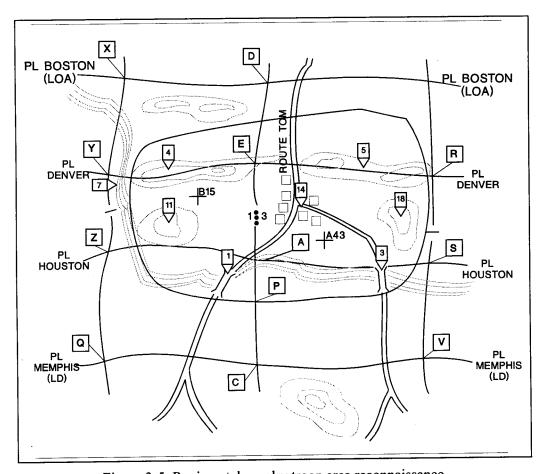


Figure 3-5. Regimental cavalry troop area reconnaissance.

Section V. Reconnaissance in Force

A reconnaissance in force is a limited objective operation by at least a battalion-size force to obtain information and to locate and test enemy dispositions, strengths, and reactions, It may be assigned when limited information about the enemy is available, when the commander desires more specific information on the enemy, and when this information cannot be gathered by any other means. The armored cavalry regiment is of adequate size to conduct a reconnaissance in force. The division cavalry squadron may conduct a reconnaissance in force independently or as part of a larger force. Squadrons and troops perform this mission as a zone reconnaissance or a movement to contact.

Even though the commander is executing a reconnaissance in force primarily to gather information, he must be alert to seize any opportunity to exploit tactical success. If the reconnaissance in force will be conducted along a broad front, it may consist of a series of strong probing actions to test the enemy's reactions at selected points. The enemy reaction, or lack thereof, may reveal a weakness in his defenses. The commander assigning the reconnaissance in force must carefully weigh the risks involved. For instance, while the reconnaissance in force may reveal a weak point in the enemy's defenses, it may lead to a general engagement under unfavorable conditions. The reconnaissance in force may also reveal future plans to the enemy. Advance planning must be conducted for the extrication of the force or the exploitation of success.